

WHAT IS CLAIMED IS:

1. An electrostatic driving device comprising:
 - a flexible thin film;
 - a holding member, which holds the flexible thin
 - 5 film and allows the flexible thin film to bend;
 - a function member disposed on the flexible thin film;
 - a film-side facing electrode disposed on the flexible thin film;
 - 10 a base, which faces the holding member;
 - a base-side facing electrode, which is disposed on the base and faces the film-side facing electrode; and
 - a bonding spacer member, which is held between the holding member and base, bonds the holding member to
 - 15 the base, and holds an interval between the holding member and base at a predetermined interval so as to keep an electrode interval between the film-side facing electrode and base-side facing electrode at a predetermined interval.
- 20 2. The electrostatic driving device according to claim 1, wherein the bonding spacer member includes a bonding member, which bonds the holding member and base, and rigid members, which have rigidity, and the rigid members keep the interval between the holding
- 25 member and base at the predetermined interval.
3. The electrostatic driving device according to claim 2, wherein the bonding member comprises only a

portion that continuously extends around the film-side facing electrode and base-side facing electrode so that the rigid members are scattered in that portion.

5 4. The electrostatic driving device according to claim 2, wherein the bonding member comprises portions that are spatially separated and located around the film-side facing electrode and base-side facing electrode and individually include at least one of the rigid members.

10 5. The electrostatic driving device according to claim 2, wherein at least one of the bonding member and rigid members included in the bonding spacer member has conductivity, and

15 the electrostatic driving device further comprising:

 a film-side connecting member, which is disposed on the holding member and electrically connects the film-side facing electrode to the bonding spacer member;

20 a first external electrode that is prepared for the flexible thin film, the first external electrode being disposed on the base; and

25 a base-side connecting member, which is disposed on the base and electrically connects the first external electrode to the bonding spacer member.

 6. The electrostatic driving device according to claim 5, further comprising:

a second external electrode that is prepared for the base, the second external electrode being electrically connected to the base-side facing electrode; and

5 a flexible substrate including electric wirings, wherein the first external electrode and second external electrode are electrically connected to the electric wirings of the flexible substrate.

7. The electrostatic driving device according to
10 claim 2, wherein the rigid members are spherical.

8. The electrostatic driving device according to claim 2, wherein the bonding member contains an adhesive that hardens at normal temperature.

9. The electrostatic driving device according
15 to claim 8, wherein the bonding member contains a low-elasticity silicone-based adhesive.

10. The electrostatic driving device according to claim 1, further comprising protrusions that are positioned between the holding member and base and
20 protrude from one of the holding member and base, the other of the holding member and base including a facing surface that faces the tips of the protrusions, and

wherein the bonding spacer member is held between the tip of the protrusion and the facing surface.

25 11. The electrostatic driving device according to claim 2, further comprising protrusions that are positioned between the holding member and base and

protrude from one of the holding member and base, the other of the holding member and base including a facing surface that faces the tips of the protrusions, and

wherein the bonding spacer member is held between
5 the tip of the protrusion and the facing surface.

12. A method of manufacturing a electrostatic driving device including: a flexible thin film;
a holding member, which holds the flexible thin film and allows the flexible thin film to bend; a function
10 member disposed on the flexible thin film; a film-side facing electrode disposed on the flexible thin film;
a base, which faces the holding member; a base-side facing electrode, which is disposed on the base and faces the film-side facing electrode; and a bonding
15 spacer member, which is held between the holding member and base, bonds the holding member to the base, and holds an interval between the holding member and base at a predetermined interval so as to keep an electrode interval between the film-side facing electrode and
20 base-side facing electrode at a predetermined interval, the method comprising:

a member preparing step of preparing the holding member holding the flexible thin film, on which the function member and film-side facing electrode are
25 disposed, and the base, on which the base-side facing electrode is disposed;

a mixing step of preparing an adhesive-containing

bonding member and rigid members having rigidity, and mixing the prepared bonding member and rigid members so that the rigid members is scattered in the bonding member to form a mixed member including the mixed

5 bonding member and rigid members;

a supplying step of supplying the mixed member to one of the prepared holding member and base;

a positioning step of positioning the holding member and base so that the supplied mixed member is
10 held between the holding member and base, and that the film-side facing electrode faces the base-side facing electrode;

a press-bonding step of press-bonding the positioned holding member and base; and

15 a hardening step of hardening the adhesive contained in the bonding member in the mixed member held between the holding member and base so that the mixed member held between the holding member and base forms the bonding spacer member, the hardened mixed
20 member forming the bonding spacer member.

13. The manufacturing method according to claim 12, wherein a conductive film-side connecting member electrically connected to the film-side facing electrode is further disposed on the holding member
25 prepared in the member preparing;

an external electrode for the film, and a conductive base-side connecting member electrically

connected to the external electrode for the film are disposed on the base prepared in the member preparing step,

at least one of the bonding member and rigid
5 members prepared in the mixing step has a conductivity,

the mixed member supplied in the supplying step is supplied to the holding member so as to contact the film-side connecting member or is supplied to the base so as to contact the base-side connecting member, and

10 in the positioning step, the holding member and base are positioned so that the supplied mixed member contacts the film-side connecting member and base-side connecting member and that the film-side facing electrode faces the base-side facing electrode.

15 14. The manufacturing method according to claim 13, wherein, in the member preparing step, a first external electrode that is prepared for the flexible thin film is further disposed on the holding member, the first external electrode being electrically
20 connected to the film-side facing electrode, and a second external electrode that is prepared for the prepared base is further disposed on the base, the electrically connected to the base-side facing electrode,

25 the manufacturing method comprising:

a flexible substrate preparing step of preparing a flexible substrate including electric wirings; and

a connecting step of electrically connecting the first external electrode and second external electrode film to the electric wirings of the flexible substrate.

15. The manufacturing method according to
5 claim 12, wherein one of the holding member and base prepared in the member preparing step has protrusions protruding from the one toward the other, the protrusions being positioned between the holding member and base when the holding member and base are
10 positioned, and the other of the holding member and base includes a facing surface facing the tips of the protrusions when the holding member and base are positioned,

in the supplying step comprises, the mixed member
15 is supplied to the tips of the protrusions, and

in the positioning step, the holding member and base are positioned so that the supplied mixed member is held between the tips of the protrusions and the facing surface and that the film-side facing electrode
20 faces the base-side facing electrode.